

# LOCTITE HHD 5425

March 2018

**PRODUCT DESCRIPTION**

LOCTITE HHD 5425 provides the following product characteristics:

|                         |  |
|-------------------------|--|
| <b>Technology</b>       | Acrylate   |
| <b>Appearance</b>       | Translucent light blue                                       |
| <b>Product Benefits</b> | <ul style="list-style-type: none"><li>• Rapid cure</li></ul> |
| <b>Cure</b>             | Ultraviolet (UV) light or Moisture cure                      |
| <b>Application</b>      | Device assembly, Structural adhesive                         |

LOCTITE HHD 5425 dual cure adhesive is designed for use in the assembly of electronic components.

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Viscosity by Rheometer, mPa·s (cP):

@ 5 s<sup>-1</sup> 9,000

@ 50 s<sup>-1</sup> 2,000

Shelf Life @ 5°C, days 180

Flash Point - See SDS

**TYPICAL CURING PERFORMANCE****Recommended UV Cure**

Light Source and Condition

Metal halide doped spectrum UV lamp

Lamp Power, W/in 300

Distance between lamp to substrate, inches 4

Irradiance UVA, EIT puck radiometer, mW/cm<sup>2</sup> 566

Recommended Dose, seconds 5 to 25

Light Dose:

@ 5 seconds, J/cm<sup>2</sup> 2.8

@ 25 seconds, J/cm<sup>2</sup> 14.1

Moisture cure occurs at ambient temperature and humidity.

**Depth of Cure**

Depth of Cure, inch >0.25

Cures at least 0.25 inch under optimum conditions.

The above cure profile is a guideline recommendation. Cure rate and ultimate depth of cure depend on light intensity, spectral distribution of light source, exposure time and the light transmittance of the substrate.

**TYPICAL PROPERTIES OF CURED MATERIAL****Physical Properties**

Hardness, Shore D, After initial UV dose of 6.4 J/cm<sup>2</sup>, moisture cure condition of 100%RH @ room temperature:

Initial, after UV Cure 15

+ 1 day moisture cure 20

+ 2 days moisture cure 30

+ 3 days moisture cure 50

+ 4 days moisture cure 67

+ 8 days moisture cure 76

Hardness increases with additional moisture cure.

Hardness, Shore A, After 25 seconds UV Cure 68

**GENERAL INFORMATION**

**For safe handling information on this product, consult the Safety Data Sheet, (SDS).**

**Not for product specifications**

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

**STORAGE:**

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage : 2 to 8 °C**

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

**Conversions**

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{inches}$$

$$\text{N} \times 0.225 = \text{lb}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{psi} \times 145 = \text{N/mm}^2$$

$$\text{MPa} = \text{N/mm}^2$$

$$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$$

$$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$$

$$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

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The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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